

CLMPTO

1. (Amended) A flat electrical cable comprising:
an upper insulator layer;
a lower insulator layer connected to the upper layer along substantially continuous parallel spaced seams; and
an intermediate layer comprised of individual strands of conductors which lie adjacent and substantially parallel to the seams, wherein the conductors do not have an adhesive residue thereon, wherein the seams positioned between adjacent conductors have a textured surface pattern, and wherein the seams positioned along edges of the flat electrical cable have a substantially smooth surface pattern.
2. The flat electrical cable of Claim 1 wherein the upper layer includes a plurality of raised surfaces running parallel to each other along the length of the flat cable.
3. The flat electrical cable of Claim 1 wherein the upper and lower insulator layers are polyester.
4. The flat electrical cable of Claim 1 wherein the conductors are made of at least one of a copper material and a copper alloy.
5. The flat electrical cable of Claim 1 wherein at least one of the conductors is a fiber optic cable.
6. The flat electrical cable of Claim 1 wherein at least one of the seams is ultrasonically welded.
7. The flat electrical cable of Claim 6 wherein the at least one of the seams is positioned along an edge of the flat electrical cable and is broader than at least one of the seams positioned between adjacent conductors.

8. The flat electrical cable of Claim 7 wherein the at least one of the seams being positioned along an edge of the flat electrical cable is produced by a broad protrusion on an ultrasonic welding anvil.

9. The flat electrical cable of Claim 6 wherein at least one of said seams being positioned along an edge of the flat electrical cable is cut so as to form a smooth edge thereon.

10. (Amended) The flat electrical cable of Claim 1 wherein the seams positioned along edges of the flat electrical cable are broader than seams positioned between adjacent conductors.

11. (Amended) The flat electrical cable of Claim 1 wherein the seams positioned along edges of the flat electrical cable are cut so as to form a smooth edge thereon.

12. The flat electrical cable of Claim 1 wherein the conductors are exposed at an end portion of the flat cable beyond the upper and lower insulator layers.

13. The flat electrical cable of Claim 1 wherein the cable includes a continuous seam except for a nonbonded area where the upper and lower insulator layers are not connected.

14. The flat electrical cable of Claim 1 wherein the cable includes a continuous seam except for a nonbonded area where the upper and lower insulator layers include windows that expose the conductors.

15. (Amended) The flat electrical cable of Claim 1 wherein the seams positioned between adjacent conductors have a knurled textured surface pattern.

16. The flat electrical cable of Claim 3 wherein the conductors include seven conductors.

17. The flat electrical cable of Claim 16 wherein the flat electrical cable has a linear density of substantially 4.35 grams per foot.

18. (Amended) A flat electrical cable comprising:
an upper layer of polyester having a ribbed surface;
a lower layer of polyester connected to the upper layer along substantially continuous parallel space apart ultrasonically bonded seams; and
individual strands of copper conductors lying substantially parallel and adjacent to the seams between the upper and lower layers, wherein the seams positioned between adjacent conductors have a textured surface pattern, and wherein the seams positioned along edges of the flat electrical cable have a substantially smooth surface pattern.

19. (Amended) The flat electrical cable of Claim 18 wherein the seams positioned between adjacent conductors have a knurled textured surface pattern.

20. (Amended) The flat electrical cable of Claim 18 wherein the seams positioned between adjacent conductors have a repeating linear segment textured surface pattern, wherein the repeating linear segments are substantially perpendicular to a length of the flat electrical cable.

21. (Amended) A flat electrical cable comprising:
an upper layer of polyester having a ribbed surface;
a lower layer of polyester connected to the upper layer along substantially continuous parallel space apart ultrasonically bonded seams; and
individual strands of copper conductors lying substantially parallel and adjacent to the seams between the upper and lower layers, wherein the seams positioned between adjacent conductors have a textured surface pattern, wherein the seams positioned along edges of the flat electrical cable have a first zone and a second zone, and wherein

the first zone is adjacent to one conductor of the conductors and extends substantially parallel to the one conductor, and the first zone having a knurled textured surface pattern, and where

the second zone is located between the first zone and one edge of the edges, and the second zone having a smooth textured surface patterns.

22. A flat cable comprising:

an upper insulator layer;

a lower insulator layer connected to the upper insulator layer along substantially continuous parallel spaced apart seams; and

an intermediate layer comprised of conductor groups which lie adjacent and substantially parallel to the seams, and wherein the conductor groups do not have an adhesive residue thereon.

23. The flat cable of Claim 22 wherein one of the conductor groups includes a single conductor.

24. The flat cable of Claim 22 wherein one of the conductor groups includes an optical fiber.

25. The flat cable of Claim 22 wherein one of the conductor groups includes a tandem conductor group, wherein the tandem conductor group includes two substantially identical conductors positioned adjacent to each other.

26. The flat cable of Claim 22 wherein one of the conductor groups includes a dual stacked conductor group, wherein the dual stacked conductor group includes two substantially identical conductors, wherein a first conductor of the two substantially identical conductors is stacked on a second conductor of the two substantially identical conductors of the dual stacked conductor group.

27. The flat cable of Claim 22 wherein one of the conductor groups includes a triple stacked conductor group, wherein the triple stacked conductor group includes three substantially identical conductors, wherein a first conductor of the three substantially identical conductors is positioned adjacent to a second conductor of the three substantially identical conductors of the triple stacked conductor group, and wherein the second conductor of the three substantially identical conductors is positioned adjacent to a third conductor of the three substantially identical conductors of the triple stacked conductor group.

28. The flat cable of Claim 22 wherein one of the conductor groups includes a wire rope conductor group, wherein the wire rope conductor group includes a plurality of wire conductors wound together.

29. The flat cable of Claim 25 wherein another of the conductor groups includes a wire rope conductor group, wherein the wire rope conductor group includes a plurality of wire conductors wound together.

30. (Amended) A flat electrical cable comprising:
an upper insulator layer;
a lower insulator layer connected to the upper layer along substantially continuous parallel spaced apart seams; and
an intermediate layer comprised of individual strands of conductors which lie adjacent and substantially parallel to the seams, and the conductors do not have an adhesive residue thereon, wherein the seams positioned between adjacent conductors have a first textured surface pattern, and wherein the seams positioned along edges of the flat electrical cable have a second surface pattern, and wherein a surface roughness of the first textured surface pattern is greater than a surface roughness of the second textured surface pattern.

Claims 31 – 79 cancelled

80. (New) The flat electrical cable of claim 1, wherein the upper layer includes a plurality of raised surfaces running parallel to each other along the length of the cable and the lower surface is substantially planar along the length of the cable.

81. (New) The flat electrical cable of claim 18, wherein the upper layer includes a plurality of raised surfaces running parallel to each other along the length of the cable and the lower surface is substantially planar along the length of the cable.

82. (New) The flat electrical cable of claim 21, wherein the upper layer includes a plurality of raised surfaces running parallel to each other along the length of the cable and the lower surface is substantially planar along the length of the cable.

83. (New) The flat electrical cable of claim 22, wherein the upper layer includes a plurality of raised surfaces running parallel to each other along the length of the cable and the lower surface is substantially planar along the length of the cable.

84. (New) The flat electrical cable of claim 30, wherein the upper layer includes a plurality of raised surfaces running parallel to each other along the length of the cable and the lower surface is substantially planar along the length of the cable.